NFκB p65 antibody (pAb)

Catalog Nos: 39369, 39370
RRID: AB_2793231
Isotype: Serum
Application(s): ChIP, ChIP-Seq, EMSA, WB
Reactivity: Human

Volumes: 100 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 65 kDa

Background: NFκB p65 (Nuclear factor NF-kappa-B p65 subunit also known as NFκB p65 or RelA) is a member of the Rel family of transcription factors that are involved in processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. The Rel family includes c-Rel, RelA (NFκB p65, NFκB3) and RelB (I-Rel). Rel proteins form dimers with the NFκB p50 (proteolytically processed from p105/NFκB1) and p52 (proteolytically processed from p100/NFκB2) members of the NFκB family that bind DNA and activate transcription. The NFκB p65/p50 heterodimer is the most abundant form of NFκB.

NFκB signaling is negatively regulated by the sequestration of the NFκB complex in the cytoplasm by its association with the IκB family of inhibitory proteins. The IκB Kinase (IKK) complex is the key enzyme involved in the activation and translocation of NFκB. The IKK complex is composed of two catalytic subunits (IKKα and IKKβ) and a regulatory subunit (IKKγ). Upon its activation, the IKK complex phosphorylates IκB proteins (IκBα, IκBα phospho Ser32, 36), which marks them for ubiquitination and degradation. This enables the NFκB complex to translocate to the nucleus where it regulates transcription by binding to DNA.

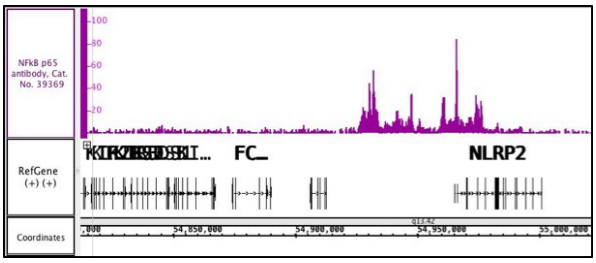
Immunogen: This NFkB p65 antibody was raised against a peptide immunogen corresponding to the C-terminal of human p65.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:
Applications Validated by Active Motif:
ChIP-Seq: 10 µl per ChIP
ChIP: 4 µl per ChIP
WB: 1:2,500 - 1:5,000 dilution

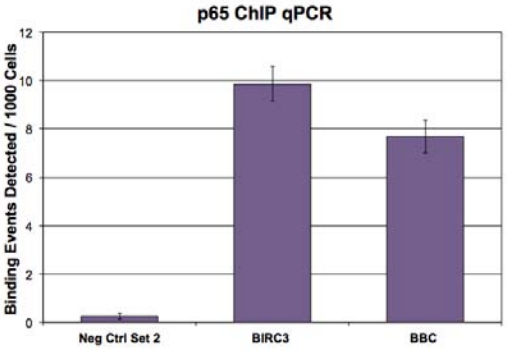
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



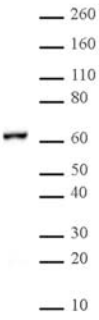
NFkB p65 antibody tested by ChIP-Seq.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 25 µg of chromatin from a human brain tumor and 10 µl of NFkB p65 antibody. ChIP DNA was sequenced on the Illumina NextSeq and 9.5 million sequence tags were mapped to identify NFkB p65 binding sites on chromosome 19.



NFκB p65 (pAb) tested by ChIP.

ChIP was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 2 million HT29 cells treated with TNF and 10 µl of p65 antibody. ChIP DNA was used in qPCR with the negative control primer pair or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



NFκB p65 (pAb) tested by Western blot.

NFκB p65 detection by Western blot. The analysis was performed using 20 µg HeLa cytoplasmic extract and NFκB p65 pAb at a 1:2,500 dilution.